Anson, Robie

From: Anson, Robie
Sent: Friday, June 14, 2013 10:51 AM
To: Ostenso, Nile A - DNR
Cc: Pfeifer, David; Mugan, Tom J - DNR
Subject: RE: Draft Pulliam PMP

Nile,

Please see our responses below, in red. I think that we are largely on the same page as the permittee, but we would be willing to have another phone call if it would help to move the process forward.

Thanks,

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From: Ostenso, Nile A - DNR [mailto:Nile.Ostenso@wisconsin.gov]
Sent: Thursday, June 13, 2013 9:52 AM
To: Anson, Robie
Cc: Pfeifer, David; Mugan, Tom J - DNR
Subject: RE: Draft Pulliam PMP

Hi Robie,

We discussed the initial response of Mark Metcalf to your comments on their June 4th revised PMP. Here are the following main points we discussed yesterday or at my latest thoughts. My suggested resolutions are provided as I understand both sides.

Comment #1, is a good clarification and accepted.

Comment #2. They were not aware that the phase "all feasible steps" was directly from the EPA rules and had to be stated this way in the PMP. The impression of this addition is that it could go beyond the understanding we generally have on the PMP as it was developed. This understanding is that the corrective action to be taken when mercury is found in the wastewater would be guided by some general factors as outlined in the June 4th PMP. These include the factors a) through d) or e). The purpose here is to have practical end points on what are acceptable feasible actions to be taken to reduce mercury. While the evaluation gives a clear outline on looking at options, it is not does not clearly state that feasible options will be taken. Yet this is the general understanding of the PMP process to reduce mercury levels as it is feasible to do so. I believe there is general agreement on action will be take when feasible to do so. To this end, please consider the following suggestion:

"If a plant process is identified to be adding mercury to the facility's wastewater treatment system at levels above the background levels of the original source water supply, then the facility will evaluate the impact of possible actions based on expected water quality improvements at Outfall 101. The permittee will take all feasible steps to reduce the mercury in the facility's effluent that is attributable to that plant process. This feasibility evaluation will take into consideration the following…"

The term 'all feasible steps' is simply a way of saying that the permittee must ensure that the highest attainable use is achieved in the receiving water during the permit term. Protection of the receiving water's highest attainable use is required when a variance is granted and is non-negotiable.

Our understanding of the PMP is as follows: The permittee will monitor within the Pulliam facility's waste stream to determine where mercury may be originating. When monitoring identifies potential sources, we expect that the permittee will develop options for addressing those sources. At some point, the permittee will have to evaluate the viability of the options they have identified for reducing the mercury load to their waste stream. They may find that it does not make sense to pursue certain reduction options because: (a) they will have no discernible impact on the effluent quality at Outfall 101 (i.e. upstream controls would not augment mercury reduction capabilities at the facility's wastewater treatment plant); (b) it is unlikely that the control option would successfully reduce mercury, and/or; (c) implementing a particular control option is itself unattainable for one of the reasons outlined at 40 CFR 131.10(g). On the other hand, the permittee may find that certain mercury reduction options are feasible and would have an impact on the effluent quality at Outfall 101. We expect that the permitee will implement feasible mercury reduction options that will improve effluent quality at Outfall 101. They may choose which options to implement first, based on a prioritization scheme that they define. I believe that the permittee shares this view of the PMP. If not, we should arrange a conference call to discuss.

Please consider the following edit of your above suggestion. It eliminates language associated with the original source of the mercury because that is not an appropriate criterion by which to evaluate whether to implement a mercury reduction action (more on that below). I've also included the considerations around feasibility directly in the paragraph, excepting (e), as discussed below. I think that this language clearly articulates our expectations. Again, if our expectations differ from the permittee's, it may make sense to have a second phone call.

"If a plant process is identified to be adding mercury to the facility's wastewater ~~treatment system at levels above the background levels of the original source water supply~~, then the facility will evaluate the impact of possible mercury reduction actions based on expected water quality improvements at Outfall 101. After reviewing (1) the likelihood of achieving expected results; (2) ease of implementation; (3) whether the control measures in the process will have a discernible impact on effluent quality at Outfall 101, and; (4) whether implementing a particular control is expected to itself be unattainable for one of the reasons in 40 CFR 131.10(g), the permittee will take all feasible steps to reduce the mercury in the facility's effluent. ~~that is attributable to that plant process~~. ~~This~~ feasibility ~~evaluation will take into consideration the following…"~~

Comment #3. This comment was discussed with Mark and he felt that even though redundant it would add clarity to the feasibility evaluation. I believe that Pulliam would agree to drop e).

Dropping (e) is consistent with EPA's position that the permittee must take all feasible steps to reduce mercury in the plant's effluent. We can discuss this in more detail if Pulliam is not amenable to dropping the language.

Comment #4. As the PMP is presented as an outline, this comment is too detailed by introducing the terms "concentration and load" and this may introduce some uncertainty or restriction on the PMP process. We have specified that at mass balance of mercury in the system will be provided. The details in the PMP outline do not specify which will be used "concentration or load" at what point in the in investigation, in the evaluation of feasibility and/or in the decisions making process. It is understood that "concentration" and "load" will be used as appropriate to present PMP results. It is reasonable to expect that mass or load will be used where appropriate. Therefore, this level of clarification is not needed in the outline. I would suggest, no change is needed.

Pulliam included the term "concentration or load" at bullet point (c) on page 1 in their June 5 revision of the PMP. Is there a specific reason that this term is now a concern?

The reason for my June 11 comment is that the June 5 revision of the PMP does not clearly articulate that the level of mercury in each individual waste stream will be compared to the level of mercury in the water source feeding that waste stream (i.e. Green Bay city water "feeds" the demineralizer waste stream). As the June 5 PMP was written, a reader might infer that the level of mercury in each waste stream would be compared to the ambient concentration of mercury in the Fox River. Such a comparison would not enable the permittee to determine where mercury is introduced to the waste stream and would compromise the effectiveness of the PMP. I still believe that is is appropriate to replace "If a wastewater stream is determined to be contributing mercury to the wastewater treatment facility above the background levels of the service water supply (Fox River), quarterly sampling will continue during the permit term unless or until…" with "If the concentration or load of mercury in any individual waste stream (e.g., demineralizer waste) exceeds the

concentration or load of mercury in the water that is supplied to the facility to feed the processes associated with that waste stream (e.g., City of Green Bay water), then quarterly sampling will continue unless or until…"

Comment #5. This comment asks for clarification on in bullet point 2 on page 2 for "criteria to be used to determine whether a specific waste stream has contributed a consistent concentration." This point is well taken. The outline is not intended to provide the details of how data will be evaluated since the nature of the results dictate the evaluation to be used. It would be useful for the outline to state that appropriate scientific and statistical methods will be used to present PMP results.

There seem to be two cases in which the permittee might propose to discontinue monitoring in a specific waste stream: (1) where monitoring data suggest consistently low mercury levels that the permittee will not act upon (because it would not be feasible or beneficial to implement control actions) and; (2) where monitoring data suggest consistently higher mercury levels where the permittee will take action and does not need additional data to support decision-making. In the former case, annual monitoring to reconfirm low mercury levels would be appropriate. In the latter case, we expect that the permittee would implement mercury control actions and begin monitoring again once control actions are finished. Do you agree? Would you and the permittee be amenable to including language in the PMP outline that requires the permittee to notify WDNR of any decision to discontinue monitoring and await a response before actually ceasing monitoring activity?

If the above clarifications are acceptable to you, I believe they will be agreeable to Pulliam.

Thanks,

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From: Anson, Robie [mailto:anson.robie@epa.gov]
Sent: Tuesday, June 11, 2013 4:18 PM
To: Ostenso, Nile A - DNR
Cc: Singletary, Lynn L - DNR; Pfeifer, David; Wester, Barbara
Subject: RE: Draft Pulliam PMP

Hi Nile,

Thank you for forwarding these documents. I have a few thoughts:

1. I would like to verify that the permittee will analyze Hg level in the City of Green Bay water prior to any modification or treatment by the permittee (i.e. City of Green Bay water will be 'raw' when Hg level is documented).

2. Suggested language change for the end of first paragraph on page 1. Change "If a plant process is identified to be adding mercury to the facility's wastewater treatment system at levels above the background levels of the original source water supply, then the facility will evaluate the impact of possible actions based on expected water quality improvements at Outfall 101. This evaluation will take into

consideration the following…" to "If a plant process adds mercury to the facility's wastewater, then the permittee will take all feasible steps to reduce the mercury in the facility's effluent that is attributable to that plant process. The permittee will evaluate the impact of possible actions based upon expected water quality improvements at Outfall 101. This evaluation will take into consideration the following…"

3. It does not seem appropriate to include consideration (e) ("…and whether the source of the mercury is from the power plant or from the water supply") in the evaluation of whether to take action to reduce Hg in the wastewater because the sentence prior (as edited in comment 2, above) establishes that a plant process has been identified as adding Hg to the facility's wastewater. Please delete bullet (e) in the middle of the first page.

4. Suggested clarification for the second sentence on p. 2. Change "If a wastewater stream is determined to be contributing mercury to the wastewater treatment facility above the background levels of the service water supply (Fox River), quarterly sampling will continue during the permit term unless or until…" to "If the concentration or load of mercury in any individual waste stream (e.g., demineralizer waste) exceeds the concentration or load of mercury in the water that is supplied to the facility to feed the processes associated with that waste stream (e.g., City of Green Bay water), then quarterly sampling will continue unless or until…"

5. The permittee commits to collecting quarterly samples of boiler sluice water, boiler seal water, boiler blow down, coal pile runoff, sulfuric acid rinse water, caustic rinse water, City of Green Bay water, and non-contact cooling water quarterly for at least two years and unless and until it meets one of three requirements. One of these requirements relies upon a finding that a waste stream "has contributed a consistent concentration of mercury to the wastewater treatment facility" after a minimum of two years of sampling. In the PMP, please provide the criteria to be used to determine whether a specific waste stream "has contributed a consistent concentration of mercury to the wastewater treatment facility."

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From: Ostenso, Nile A - DNR [mailto:Nile.Ostenso@wisconsin.gov]
Sent: Wednesday, June 05, 2013 7:40 AM
To: Anson, Robie
Cc: Singletary, Lynn L - DNR; Mugan, Tom J - DNR
Subject: FW: Draft Pulliam PMP

Hi Robie,

These documents will be added to Attachment III of the fact sheet: WPSC Pulliam Fact Sheet Attachment III Alternative Hg Effluent Limit. An updated Attachment III will be forwarded shortly.

Thanks,

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From: Metcalf, Mark W [mailto:MWMetcalf@integrysgroup.com]
Sent: Tuesday, June 04, 2013 4:34 PM
To: Ostenso, Nile A - DNR
Subject: Draft Pulliam PMP

Nile,

Attached is a revised draft PMP outline for Pulliam, along with responses to EPA's comments. Please note that WPSC intends to initiate the sampling identified in the outline upon receiving approval of the final PMP from the Department. Feel free to give me a call if you have questions.

Mark

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